Standard 2.6: Fitness

All students will learn and apply health-related fitness concepts.

Fitness is a state of well-being that allows an individual to participate in daily activities with vigor. Being physically fit reduces the risk of heart disease, hypertension, cancer, and other health conditions related to a lack of exercise. Physical fitness includes both health-related fitness and skill-related fitness. Three *Comprehensive Health and Physical Education Standards* focus on fitness: *Standard 2.1: Health Promotion and Disease Prevention* focuses on the impact of exercise and nutrition on wellness; *Standard 2.5: Movement* focuses on motor skill development and various forms of physical activity; and *Standard 2.6: Fitness* focuses on the components of health-related fitness including cardiorespiratory endurance (efficiency), muscular strength and endurance, flexibility, and body composition.

As a result of technological advances, society has less need to become physically active. Most people do not participate in sufficient physical activity to derive healthful benefits, yet we know the benefits of physical activity are numerous. Participating in fitness activities improves one's sense of well-being by contributing to a positive self-concept, improving one's appearance, and increasing one's stamina. Exercise has a positive impact on energy level and mental health. In addition, many fitness activities provide social opportunities that improve one's quality of life.

The aim of this *Standard* is to develop the knowledge and skills necessary to participate in physical activity on a daily basis. Convincing children to initiate a lifelong habit of exercise is often difficult. Young people rarely have health problems that prompt them to begin exercise programs. Unfortunately, the health effects of early participation in physical activity do not carry over into adulthood unless physical activity continues to be a part of the individual's daily routine. Convincing students to establish healthy exercise habits now and maintain those behaviors throughout life is the real challenge. Students need to experience how exercise benefits them physically, mentally, and socially.

Physical education endeavors to educate students about health-related fitness and the importance of regular physical activity. Students need to understand the reasons why fitness is necessary before they can successfully plan and implement a personal fitness program. The instructional program should support the student's cognitive development as well as his/her motor development.

Performance on physical fitness tests should not be the primary goal of teaching fitness; however, the results of fitness assessments should be used to develop activities that support the development of all students. Instructional programs should focus on a wide range of activities that help students develop appropriate skills, enable them to understand fitness concepts and their application, and foster confidence in and an appreciation of physical activity as a means to wellness. This *Framework* provides numerous activities in support of this goal.

FITNESS COMPONENTS

Indicator 2.6-1: ***Identify the components of health-related fitness and describe activities related to each component.***

SAMPLE LEARNING ACTIVITIES: K-2

Teacher Tip: The school nurse may be able to loan the equipment needed for the next activity. If that is not possible, contact a local college or technical school. Students preparing to enter healthcare fields can assist the children in locating and hearing their heartbeat.

A. LISTEN TO YOUR HEART

For this activity, you need one stethoscope for every two students and alcohol wipes to clean the earpieces. Explain that the heart is about the size of a fist. As students open and close their fists to simulate the pumping motion of the heart, have them describe the location and function of the heart. Explain that the heart is really a very strong muscle and that it needs exercise to stay strong and healthy. Play an audiotape of heart sounds (available from the American Heart Association), and discuss the different sounds. Students chant the "lub-dub" sounds. Demonstrate the use of a stethoscope, then pair students to hear each other's resting heartbeat. Next, students jog in place for one minute and then try to listen to their partner's heartbeat again. Discuss the differences (e.g., heart beating faster, moving more blood to the muscles, pumping harder).
[CCWR: 3.7/3.9]

Teacher Tip: Students need to be familiar with basic information about body systems in order for students to understand the concept of *fitness*. Take advantage of opportunities to design lessons that complement and support activities in both health and science.

B. LET'S BE ACTIVE!

For this activity, create a number of movement skill stations. Ask students what it means to be in shape. Write the students' responses on the board. Write the words ***Active*** and ***Inactive*** on the board and ask students to define them. Divide the class into small groups to list and/or illustrate three things they do to keep active and three inactive things they do. Reconvene the class and create a master list. Send each small group to a movement station to become active. Activities at each station are performed to a variety of musical selections. After each group has completed all the stations, reconvene the entire class. Show the class posters or pictures that illustrate activity and inactivity. Students classify the pictures and justify their answers (e.g., it makes your heart beat faster, you use your whole body). Students draw a picture of themselves being active. Post the pictures in the gym or on a bulletin board.
[CCWR: 3.12/4.2/4.9]

Teacher Tip: The following activity requires creative artwork. Ask the art teacher or a few talented older students to assist in the design of the posters. The characters can become mascots for your fitness program, and their likeness can be reproduced on stickers, T-shirts, and banners.

Teacher Tip: Some resources combine muscular strength and endurance, thus producing four fitness components. Be consistent in your definitions.

C. THE FAMOUS FIVE

For this activity, create a series of posters that illustrate each component of health-related fitness. Each component is represented by a character, such as "Flexible Bill" (flexibility) or " B. C. Body" (body composition). Each character should clearly illustrate the fitness concept. Use the posters to teach the concepts, then place the posters on the wall. Each week, students bring in pictures showing people participating in fitness activities. Students place the pictures under the appropriate poster. Use the posters to continuously reinforce the fitness components throughout the school year.

Variation: Create stories about the characters that describe activities related to the fitness component (e.g., Flexible Bill is a gymnast or dancer; B. C. Body describes the relationship between nutrition and fitness). Students provide illustrations for the stories.

Variation: Create puppets that illustrate each component of health-related fitness and have students use them to create an original puppet show promoting fitness.
[CCWR: 3.8/3.12]

Teacher Tip: Some students at this level may have difficulty learning the vocabulary (e.g., *endurance, composition*). Students need to know the health-related fitness components by description rather than by specific terms (for example, "heart and lung fitness" may be more appropriate than "cardiorespiratory fitness"). Use symbols, posters, and other visual cues to reinforce the vocabulary.

D. GET FIT!

Create one station for each fitness component. At each station, use posters and pictures to remind students of the fitness component they are working on. Have a stack of colored cards at each station with the fitness symbol on it (e.g., a heart for the cardiorespiratory station) and a different number on the back. Divide the class into five groups, and have each group report to a station. After completing the designated task, each group member gets a card from that station and then moves to the next station. At the end of the circuit, each student should have five different cards. Reconvene the entire class and arrange the students in a circle. Call out a number and a fitness symbol. The student holding that card demonstrates a fitness activity related to that area or answers a simple question about the component. Complete the lesson with a review of the components.
[CCWR: 3.8/3.9/4.9]

FITNESS COMPONENTS

Indicator 2.6-1: ***Identify the components of health-related fitness and describe activities related to each component.***

SAMPLE LEARNING ACTIVITIES: 3-4

A. CHART THE HEART

Review how to take and record a radial or carotid pulse. Students take their pulse several times during the school day and at home and graph the results on a chart. (Provide students with graph paper or a simple chart.) Brainstorm a list of times to check the pulse (e.g., upon rising in the morning, while waiting for the bus, after a test, recess, before and after lunch, when watching TV). Students perform this activity for three days, complete the graph, and summarize the results. Discuss the process, the changes in pulse rates, and why the changes occurred.
[CCWR: 3.7/3.12]

Teacher Tip: Students need a basic understanding of the muscles and bones in order to benefit from this activity. Review the names and locations of major muscles and joints. Create posters, signs, and other visual aids to reinforce the names and locations of these important body parts.

B. KEEP GOING

Show students the TV ad for the "Energizer Bunny." Students describe the ad and the message (the bunny keeps going and going). Explain that students will become Energizer Bunnies — that is, they will develop ***endurance***. Ask students to describe someone who is strong. Write their ideas on the board. Explain that it is important to have both ***strength*** and ***endurance***. On one end of the board, write the word "Short" and on the other end of the board write the word "Long." Connect the two words with a line. Next to the word "Short", write the word ***strength*** and next to "Long" write ***endurance***. Discuss the differences in activities that support each. Demonstrate several different exercises that work specific muscle groups (upper body, legs, abdominals). Students report to stations to perform exercises that work the various muscle groups. At each station, post signs that describe the activity and the muscles involved. After students have completed the circuit, reconvene the class and show pictures of various activities. Students indicate if the activity is one that requires strength or endurance (e.g., use a picture of marathon runners, an iron cross on rings, a bike race).
[CCWR: 3.7/3.9]

C. MUSCLE OF THE MONTH

Each month, select one major muscle or muscle group (e.g., quadriceps, biceps, abdominals). Describe the location and function of the muscle(s). Relate its function to specific activities, and draw attention to it during those activities. Students should be able to spell it, locate it on a diagram of the human body, and describe how it works.

Variation: Divide the class into small groups, and assign each group a major muscle. Each group reports to the class, describing the muscle's location and its functions, and demonstrates an activity using the muscle.
[CCWR: 3.2/3.8/5.3]

D. FITNESS QUEST

For this activity, you need jump ropes, cones, a Nerf ball and several basketballs. Design a "Fitness Quest" sheet similar to the one below. Review the characteristics of ***cardiorespiratory fitness***, ***flexibility***, ***muscular strength***, and ***endurance***. Students perform activities listed on the sheet and name the fitness component measured by each activity. (This can be done in stations or the teacher can lead the entire class through each activity.) After all students have completed the quest, discuss the responses.

FITNESS QUEST	
Activity	**Fitness Component**
Jogging for three minutes around cones	
Climbing a rope	
Jumping rope for three minutes	
Sitting stretch	
Tag game for two minutes	
Crab legs	
Crunches	
Lower back stretch	
Two on two basketball for three minutes	

[CCWR: 3.1/3.2/3.12]

Teacher Tip: When discussing body composition, be particularly sensitive to those students with low self-esteem related to body image. Students may have an unrealistic perception of body fat, often desiring to be thinner when in fact they are well within normal limits for their age and height. If you perform body fat analysis or measure height and weight, maintain privacy and do not post the results. Refer students with concerns to the school nurse.

E. BODY TYPES

Display posters of the three basic body types—***endomorph***, ***ectomorph***, and ***mesomorph***. Explain that most people are actually a combination of these body types. Brainstorm factors that contribute to a person's body type (e.g., heredity, diet, exercise). Explain that ***body composition*** is the amount of fat cells compared to lean cells in the body. Emphasize that everyone needs a certain amount of body fat to maintain certain important functions but that excess body fat (***obesity***) can lead to a number of lifelong problems such as joint problems, diabetes, and heart disease. Explain that body

composition can't be changed in a short period of time. Divide the class into two groups. Each group develops a list of things individuals can do to maintain healthy body weight. Each group ranks the items from 1 (most important) to 5 (least important). Reconvene the entire class and discuss the rankings. From the student lists, vote on the top three things a person can do to maintain healthy body composition.
[CCWR: 3.8/3.12/4.2]

Teacher Tip: Students need to understand the interrelatedness of both health-related and skill-related fitness components and how each aspect influences the other.

F. FITNESS SKILLS

Define, discuss, and demonstrate ***agility, balance, coordination, reaction time, speed,*** and ***power***. Divide the class into groups to develop a list of activities and actions that clearly illustrate one fitness skill. Groups prepare a demonstration for the class (e.g., catching a ball requires coordination; running to first base requires speed; returning a tennis serve requires a quick reaction time). After the presentations, brainstorm other movement activities that support fitness and require the use of one or more of the fitness skills. Post chart paper around the room, and allow students to add other activities to the lists as the year progresses.
[CCWR: 3.2/3.8/4.2]

FITNESS TECHNIQUES

Indicator 2.6-2: ***Demonstrate appropriate techniques used in fitness activities.***

SAMPLE LEARNING ACTIVITIES: K-2

A. WHAT'S A WORKOUT?

Brainstorm ways students can keep active. Ask students how many minutes they should be active every day in order to keep healthy. Write ***30 minutes a day*** on the board, and explain that this recommendation comes from national experts. Explain that those experts also recommend safe and healthy ways to exercise and keep active. Write ***5-20-5*** on the board. Explain that each 30-minute workout session should have a beginning, middle, and end—just like a good story. Under the appropriate number, write the words ***warm-up, workout,*** and ***cool-down.*** Lead students through each segment of a workout, emphasizing the transition to the next segment and reinforcing why each part is important. Divide the class into three smaller groups. Each group designs an example of one aspect of the workout and shares it with the class.

Variation: Students calculate the number of minutes spent warming up, working out, and cooling down over a one-week or one-month period and graph each segment.
[CCWR: 3.8/3.13/4.2]

Teacher Tip: When introducing the next activity, refer to the 30-minute workout described above. Be sure students understand the phases of a workout before working on pace and content.

B. PACE YOURSELF

Explain that students need to learn how to ***pace*** themselves, that is, to exercise at the right speed, so they can last the entire 30 minutes without quitting. To experience this concept, design a simple circular running area, about 200 yards in length. Students run continuously for a specific time around the course (four to five minutes). Students may run with friends. Every time a student passes the starting point, hand him/her a popsicle stick or poker chip. At the end of the designated time, each student counts the number of sticks or chips. Allow a rest period and then repeat the exercise. The goal is to receive the same amount of sticks or chips on the second run as on the first. After all students have completed the second run, discuss the results and emphasize pacing.

Variation: Students predict their own performance (the number of times completing the course) and compare results.
[CCWR: 3.3/3.9/4.11]

C. COUNT TO 10 AND STRETCH

Create illustrations of various stretching exercises, laminate the pictures, and hang them around the gym. Each student needs a small mat or carpet square to create self-space. Demonstrate a simple stretch, then have students imitate your actions. As you demonstrate each stretch, explain the importance of performing each stretch slowly. (Have the students count to 10 to establish a rhythm.) Students move to a stretch station (one of the posters on the wall) and try to copy the stretch illustrated on the poster. Circulate to ensure students are performing the movements correctly and counting to 10. Reconvene the class, outline the important points on the board, and lead the class in one final stretch.

Variation: As you show each illustration, the entire class stretches together. Repeat this activity on a regular basis to emphasize appropriate stretching techniques.

Variation: Students list the times and places when stretching might be performed (e.g., when they get out of bed in the morning, after sitting at their desk for a long time) and demonstrate those kinds of stretches.
[CCWR: 3.2/3.12/5.1]

D. IT'S A SMALL WORLD

Explain the concept of ***aerobic endurance***—the heart, lungs, and muscles can perform exercise over a long period of time. Students participate in regularly scheduled activities designed to increase their endurance, performing a specified locomotor movement (e.g., run, walk, skip) over a measured pathway. Gradually increase the duration of the activity over time. As part of the activity, students choose to "travel" to a popular resort area or city, compute the mileage necessary to reach the destination, and log the number of miles of locomotor movement attained. Students display their journey on a large classroom map.
[CCWR: 2.6/3.4/3.12]

E. FLEX AND STRETCH

For this activity, you need one piece of taffy or a Tootsie Roll for each student. Place the candy in

the refrigerator for a few hours and don't take it out until just before class. Give each student a cold piece of taffy. Tell them to try and stretch the candy. (It will be difficult because it is cold.) Instruct the students to hold the taffy tightly in their hand and move about the play area. After about five minutes of activity, students stretch the taffy (it should be easier this time because the taffy is now warm). Relate this to the need to warm up muscles prior to exercise.
[CCWR: 3.2/3.7/3.12]

FITNESS TECHNIQUES

Indicator 2.6-2: ***Demonstrate appropriate techniques used in fitness activities.***

SAMPLE LEARNING ACTIVITIES: 3-4

A. HARMFUL EXERCISES AND SAFE ALTERNATIVES

Develop a series of illustrations that depict safe and harmful ways to perform certain exercises (e.g., forward lunge vs. deep knee bends, curl-ups versus straight leg sit-ups). Show each picture and have the students select the picture that illustrates the safe method. After reviewing the illustrations, post them on the wall. Students circulate to each area and correctly perform the exercise.

Variation: Place a deck of cards at each station. Each student selects a card from the deck and correctly performs a designated exercise according to the value of the card.
[CCWR: 5.1/5.3]

Teacher Tip: Students need an understanding of the terms *aerobic* and *nonaerobic* (or *anaerobic*) prior to this activity. They also need a basic understanding of the cardiorespiratory system and the body's need for oxygen.

B. PACE YOURSELF

For this activity, you need a playground ball, four cones, and a stopwatch. Use the cones to set up a 200-yard circular course. Review these important concepts prior to the activity:

- Aerobic exercise requires the heart and lungs to work hard.
- Aerobic exercise requires continuous movement and lasts longer than 90 seconds.
- Aerobic exercise increases the supply of oxygen to the muscles.
- Not all activities are aerobic.

To keep the important concepts visible during the activity use posters, leaning placards, or large cards. Divide the class into two teams, and play a short game of kickball (one inning). After the one-inning game, students run/walk the 200-yard course. Students begin various starting points along the course and move at a comfortable pace, keeping in constant motion the entire time period.

(Establish a set time period for the class based on the age/grade levels.) Students compare the two activities using the following questions and complete a journal entry describing the differences between aerobic and nonaerobic (or anaerobic) activities.

1. Which activity required your heart and lungs to work harder? Why?
2. Are the two activities similar?
3. How much time did you spend moving when playing kickball?

[CCWR: 4.9/4.11]

C. WINNING WARM-UPS

Flexibility exercises are an essential part of any fitness routine. These movements get the body ready for exercise by supplying oxygen to the muscles. Ask how many students warm up before playing soccer, baseball, or another physical activity. Compare the students' warm-up routines with the routines professional athletes perform prior to each game (e.g., baseball players toss the ball and forth, tennis players rally with an opponent, gymnasts practice approaches to apparatus). Show students a video of professional athletes warming up prior to a game. Explain that athletes use both general and specific exercises to warm-up. Divide the class into groups of four. Give each group a sports magazine (e.g., *Sports Illustrated, Runner's World*). Each group selects pictures of an individual participating in a particular sport. Provide students with a handout (see sample below) to guide them in the development of a simple warm-up for the player in the picture. Students draw the exercises, write a description of each activity, and then demonstrate the correct warm-up for the chosen sport.

WARMING UP

Sport: Soccer

Primary Body Parts Used in the Sport: Legs

Stretching Activities

Describe three specific exercises that stretch the joints used in the sport.

1. Sitting stretch
2. Single leg tuck
3. Calf stretch

Reduced Speed Activities

Skill Warm-up

1. Passing soccer ball in pairs
2. Dribbling soccer ball across the field
3. Shooting at the goal, concentrating on accuracy

[CCWR: 3.1/3.2/3.13/5.1]

D. GUIDING PRINCIPLES

List each of the following words on the board. Instruct students to put one word at the top of each page in their notebook. Below the word, students write the definition of each term (provide the definition).

- *Warm up*
- *Cool down*
- *Progression*
- *Frequency*
- *Specificity*
- *Overload*
- *Intensity*

Each day, demonstrate and discuss examples of one of the vocabulary words. Students participate in the activity and note the examples in their notebook. On a regular basis, students define the terms and demonstrate the principle using one of the examples listed in their notebook.

Variation: Create a graphic organizer to help students define the terms. Students use the organizer to determine when to use the principle and apply it to a number of movement activities.

Variation: Students develop concept maps that define the FIT Formula (or FITT Formula). Develop comparison/contrast webs to illustrate the similarities and differences in aerobic and anaerobic activities.

[CCWR: 3.8/3.9/3.13]

Teacher Tip: Discuss the concepts of *overload, progression,* and *endurance* and be sure students understand the concepts before initiating the next activity.

E. CRANK IT UP

Each student takes his/her pulse and records the resting heart rate. Students walk the beat of selected music for about 30 seconds and then take their pulse a second time. Students experience the ***principle of overload*** (working harder than usual) by walking again at the same pace but this time they add big arm swings to the walking pattern. Once again, after 30 seconds, students stop and record their pulse. Next, students jog for 30 seconds, take their pulse and record it, then add vigorous arm motions to their jogging pattern. Once again, students take and record their pulse. Students compare the data collected and draw conclusions. Ask: "How does this activity demonstrate ***overload*** and ***progression***? What happened to your heart rate? Why?"

[CCWR: 3.6/3.7/3.12]

FITNESS AND WELLNESS

Indicator 2.6-3: ***Describe how fitness activities enhance wellness.***

SAMPLE LEARNING ACTIVITIES: K-2

Teacher Tip: Relate these activities to lessons on body systems, nutrition, and stress management found in *Comprehensive Health and Physical Education Standards 2.1 and 2.2*.

A. HEALTHY BODIES

Divide the class into several small groups, and assign each group a part of the body (e.g., heart, lungs, muscles). Each group lists or illustrates two ways that being active keeps the body part healthy. Reconvene the entire class and list the ideas on the board. Students create an "Active Me, Healthy Me" bulletin board display, illustrating the ideas generated in their groups.

Variation: Each week, teach a new exercise that focuses on a different part of the body.
[CCWR: 3.9/3.15]

B. FITNESS BENEFITS

Create a series of posters that illustrate the benefits of being active. Display each picture and ask students to describe the action and how the person in the picture might be feeling. Relate this to the benefits of activity. Examples of pictures might include:

- A smiling child running (feeling free and happy)
- A group of people engaged in a game or sport (having fun)
- A figure skater, dancer, or gymnast performing (graceful, powerful)

Variation: Students bring in pictures from magazines or newspapers that illustrate the benefits of being active and create a class collage or bulletin board.
[CCWR: 3.7/3.8/3.15]

C. HOW DO YOU FEEL WHEN YOU EXERCISE?

Ask students: "How do you feel when you exercise? when you are active?" Write all responses on the board. (Make sure every student gets to answer, even if the response is negative.) Divide the class into two groups. One group selects all the responses that are positive, and the other focuses on the negative responses. In each group, students compile a list. Discuss the results and clarify responses. (There should be more positive responses than negative ones.) Emphasize that movement and activity are important for good health.

Variation: Divide the class into small groups to develop a list of physical activities that are beneficial to health. Share the lists and discuss. Students complete the following statement in their journal: "Being active is good for me because…"
[CCWR: 3.1/3.10/3.12/4.2]

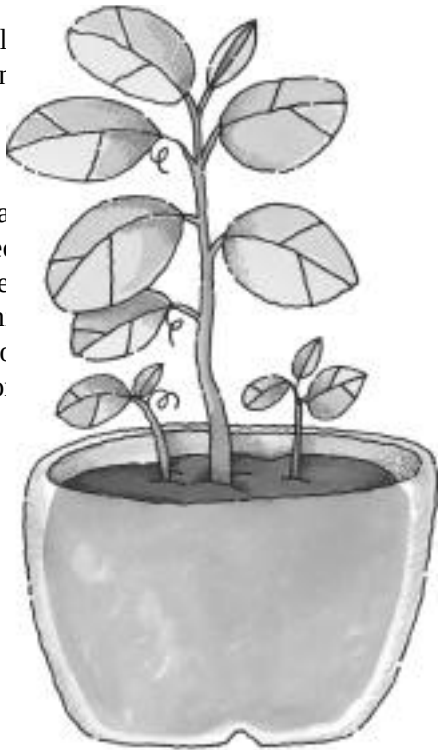
D. ACTIVE AND LOVIN' IT

For this activity, you need two separate play areas. Send half of the class to one side of the gym, and tell them to perform a designated movement activity that will increase their pulse and breathing rate (e.g., jump rope). The other half of the class dribbles a ball and moves within boundaries. Students perform these activities for about five minutes and then switch. After the two activity sessions are completed, review the concept of being active and its relationship to a healthy heart and lungs. Note other benefits of exercise. Ask: "Does performing these activities require more energy than working at your desk or watching TV? Why?" Emphasize that when you are active, your heart beats faster, you sweat, and you breathe faster. After the discussion, students play a pacing game, a running activity that requires students to keep a steady pace for an extended period of time. Students jog, walk, or perform some other locomotor movement. After the pacing exercise is completed (during the cool down period), talk with students about being active. Ask: "What does being active do for our bodies?" Review the benefits of fitness activities.

Variation: Students create a poster illustrating the benefits of being active and complete a journal activity triggered by "I am active because…" or "My heart is healthy because I like to…"
[CCWR: 3.9/3.14]

E. USE IT OR LOSE IT

Compare the maintenance of strong muscles to growing a heal
plant. Brainstorm what is needed to have a plant grow strong ar
healthy. Begin with two healthy plants. Give one the proper
amounts of water, food, sun, and air. Neglect the other one.
Students observe the plants each day and record the results.
After several days of neglect, the one plant should look droopy a
weak. Ask students what might happen to them if they negle
their bodies. Lead students to the effects of inactivity on muscle
(emphasize that the heart is a muscle). Explain that because ch
dren are capable of movement and their muscles help them to mo
they must also exercise to keep their body in shape. Students co
plete the activity by writing three things they can do to keep
healthy and fit.
[CCWR: 3.6/3.7/3.8/3.12]



FITNESS AND WELLNESS

Indicator 2.6-3: ***Describe how fitness activities enhance wellness.***

SAMPLE LEARNING ACTIVITIES: 3-4

Teacher Tip: Additional activities that support healthy behavior and wellness may be found in *Comprehensive Health and Physical Education Standards 2.1. and 2.2.*

A. HEALTHY HEART OBSTACLE COURSE

Review the terms ***aerobic, anaerobic,*** and ***endurance.*** To illustrate these concepts, students participate in an obstacle course that simulates the cardiovascular system. Students begin on two mats that represent the lungs. Students move to an area that represents the heart and then get "pumped" through the arteries. Use tunnels or tubes to simulate the blood flow through the vessels. Students return to the lungs and repeat the circuit, answering simple questions about the circulatory system.

Variation: Mark an outline of the heart, lungs, head, feet, and arms. The outline should be as large as a basketball court. Students follow the flow of blood through the body. Use large cards or posters to assist students in their travel. Each card describes a significant fact or interesting idea about the circulatory system. Students can jog through the system and skip sideways through the valves in the heart. Emphasize the positive benefits of exercise.
[CCWR: 3.2]

B. ACTIVITY LOG

For one week, students keep a physical activity log. Students enter information on the type of activity performed, how long it was performed, and the relative intensity of the activity (rated high, medium, or low). After collecting data for one week, students graph and summarize the results. For example, a student might play soccer each day for one hour at a medium level, play kickball twice at a low level, and run one time at a high level. Students share the results of their logs and discuss ways to improve their activity levels.

Variation: Students keep an activity log and then categorize the activities by fitness component.
[CCWR: 3.8/4.9]

Teacher Tip: The next activity shows the relationship between caloric intake and exercise. When coordinated with other nutrition activities, the activity lets students compare snack choices and encourages them to make healthy snack selections. Be advised that some students may have health problems that will prohibit them from eating the food items used in this next activity.

C. ONE M&M = ONE FOOTBALL FIELD

Set up cones 40 meters apart on a 400-meter track (or large open area). Each student eats a three-inch carrot stick and then walks the distance required to burn up the calories from the carrot stick

(walking 40 meters burns two calories; the carrot stick has about 10 calories). After students complete the walk, discuss the actual caloric value of the carrot and other "snack" foods. Listed below are caloric values of other foods that can be used for this activity.

one M&M = six calories = three cones three-inch celery stick= two calories = one cone

After the activity, students describe what happens to body weight if the body burns more calories than are taken in or if more calories are taken in than are used.
[CCWR: 3.3/3.12]

D. FITNESS SURVEY

Students develop a five-question survey about fitness and being active, similar to the one below.

SAMPLE SURVEY: FITNESS

- What kind of physical activity do you most like to do?
- What kind of physical activity do you least like to do?
- What three words describe how you feel when you exercise?
- What has exercise done for you?
- How often do you exercise?

Divide the class into several groups, each assigned to poll a specific target population (e.g., teachers, parents, first graders, high school students). Each group compares the survey results to their own group responses to the same survey questions. Students compare the class results, looking for similarities and differences and develop a comparison/contrast map to illustrate the project.
[CCWR: 3.1/3.3/3.8/3.12]

E. THE FITNESS ROAD TO WELLNESS

Create a station activity "A Road to Wellness," which allows students to experience how being active contributes to overall wellness. At each stop along the road, students "refuel" by performing a particular fitness activity or by answering questions about fitness and good health. Stations should include a relaxation stop, a hydration stop, and a nutrition stop in addition to stations for strength, flexibility, endurance, and cardiorespiratory fitness. Students receive a special card or chip for each successful refueling until they reach the end of the road where they exchange the chips for a wellness token. The token can be exchanged for classroom privileges, treats, or a simple reward.
[CCWR: 4.1/4.3/4.9]

F. AEROBIC CHOICES

Review the differences between ***aerobic*** and ***nonaerobic (anaerobic)*** activities. Explain that every sport or exercise has some value but that some are better than others for developing the heart and lungs (***endurance*** and ***cardiorespiratory fitness***). Develop a handout that requires students to compare aerobic and nonaerobic activities. (A sample is shown below.) If the activity includes continuous motion, can be played for 15 to 20 minutes, and uses the large muscles of the body, students place an "A" next to the activity (A = aerobic). Students write "N" next to the activities that are nonaerobic. If an activity seems to fall in between, students place an "AN" next to it. After labeling the activities, students transfer the names to a Venn diagram. Discuss the diagrams, add new ideas to the lists, and reemphasize the importance of being active.

AEROBIC CHOICES			
Swimming	Baseball (pitcher)	Soccer (field player)	Watching TV
Basketball	Bicycling	Soccer (goalie)	Jumping rope

[CCWR: 3.9/3.12/3.13]

FITNESS PARTICIPATION

Indicator 2.6-4: ***Participate in health-related fitness activities.***

SAMPLE LEARNING ACTIVITIES: K-2

Teacher Tip: Fitness activities are great for the entire family. Plan activities throughout the school year that support family participation. On weekends, sponsor family hikes at local parks or historic sites. Plan a family wellness night that encourages student/adult interaction, cooperation, and fun. Involve parents and community members in annual field day events or multicultural celebrations that involve fitness activities.

A. WHO'S GOT MUSCLE?

Begin this activity by asking: "Who's got muscle?" (Students will name super heroes, TV or movie stars or athletes.) Point out muscles in the arms, legs, etc. Next, have students participate in a variety of muscular strength and endurance tasks. If you have permanent playground equipment, such as a horizontal ladder or monkey bars, use them as stations. Establish several stations and review the activity to be performed at each station. Divide the class into small groups and begin one group at each station. Rotate stations every two to three minutes. After all students have completed the fitness tasks, reconvene the group and discuss how they used their muscles.

Variation: Create a series of cards with specific strength and endurance tasks illustrated on them. Distribute one card per student. On signal, students perform the task and then trade cards with another student. Continue until all students have performed several tasks, then stop and discuss the use of specific muscles for each task.

[CCWR: 3.9]

Teacher Tip: The next activity is a walk, not a run; emphasize correct walking technique.

B. LET'S START WALKING

The purpose of this activity is to have everyone walk one mile. Use a specific walking course or the high school track. If you use the track, give each student a popsicle stick or chip to keep track of each lap. At the end of the mile, discuss the benefits of walking (e.g., better health, breathing fresh air, looking at nature).

Variation: Invite parents and community members to walk with the class. Students develop a family/friends walking program and keep a log or diary of their walking experiences.

Variation: Measure the number of "laps" around the school building needed to walk one mile. During the walk, students can clean up the school yard and deposit trash into the appropriate containers.
[CCWR: 4.1/4.3/4.9]

C. IT ADDS UP TO FITNESS

For this activity, create math facts cards appropriate for the grade level (e.g., 2+3, 5-2). Establish 10 stations that require students to perform various fitness tasks and place several cards at each station. Divide the class into small groups and have students line up in the order of their birthdays. The position of leader rotates in that order with each station change. As each group rotates to a new station, the leader selects a math card and solves the math problem. The group must perform the designated exercise the number of times indicated by the answer. For example:

Problem	Activity
10 - 5 = 5	Students perform 5 crunches.
12 + 3 = 15	Students perform 15 bench steps.

[CCWR: 3.13]

E. FITNESS GRAB BAG

For this activity, write specific fitness activities on pieces of paper, then fold and place the paper slips in a paper bag. One at a time, students select a piece of paper from the bag and read the task to the class. Each student rolls dice (or uses a game spinner) and announces how many times the activity must be performed. When the task is completed, the next student selects a new task and rolls the dice. Older students may perform the number of repetitions indicated by adding the results of the throw; younger students, the face value of the throw.

Variation: Instead of rolling dice, use a deck of cards. Students perform the task based on the face value of the card.
[CCWR: 3.13]

Teacher Tip: Align the following activity with lessons in all other content areas. The library media specialist can assist students with the research for this project. In social studies, students select their destinations and create a map; in language arts they keep a diary of their journey; in art, they create a visual log of the trip; in math, they compute the number of miles traveled; in science, they examine the natural environment of their destination; and in world languages, they learn about the language and customs of the country they "visit."

F. JOG AROUND THE WORLD

Students jog a simulated trip to their state capitol, a local historic site, or another state or country. Students use print and Internet resources to plan their trip. Use a large map to plot the path and number of miles the class or school travels.
[CCWR: 2.6/2.7/3.15/4.2]

FITNESS PARTICIPATION

Indicator 2.6-4: ***Participate in health-related fitness activities***

SAMPLE LEARNING ACTIVITIES: 3-4

Teacher Tip: For students at this grade level, paired activities work best when you try to match the gender, size, and developmental level of the participants.

A. CARDIAC KIDS

For this activity, you need a large, open play area and a number of cones, preferably of different colors. Use the cones to delineate several different pathways for the following activities to be done in pairs. The student pairs move quickly and work together to complete the activities correctly. After all students have completed the course, discuss the problems encountered and how students solved any problems.

- Skipping, holding hands
- Follow the leader (hop/skip or similar combination)
- Cone slalom with hands on shoulders
- Sideways shuffle with hands on hips
- Three-legged walk

[CCWR: 4.2/4.3/4.5]

B. IT'S IN THE CARDS

Students participate in a series of fitness runs (vary the distances). Create several checkpoints along the way. At each checkpoint, runners get a playing card. At the end of the run, the player with the best "poker" hand (or highest point total) wins the run.

[CCWR: 5.3]

Teacher Tip: Use creative ways to designate leaders for group activities. Even young students can "apply" to become a team leader. Organize teams by birthday month or create teams by eye or hair color. Have students roll a die or select a card to determine team leader sequence. Organize teams by clothing color, street name, or house or apartment number. Be sure all students have opportunities to be leaders and followers.

C. FOLLOW THE LEADER

Divide the class into groups of five to seven students. One team member starts as the leader of the group and leads his/her team on a creative running pattern. At the whistle, the team leader drops back and the next person moves up to be the leader. Discuss what needed to happen each time a new leader took over.

[CCWR: 1.1/4.2/4.7]

D. RUN TO THE FRONT

Set up groups of four to six students with similar aerobic endurance and pacing speed. Each group walks around the track or course in single-file formation. When the whistle sounds, the person at the end of the line runs to the front of the line and resumes walking. During the course of the activity, change the locomotor skill from walking to jogging to skipping or some other skill. Stagger the starting points for the groups and be sure that everyone has a chance to lead. After 15 minutes of this activity, reconvene the entire group and discuss the body parts used in this activity, how the group worked together, and the concept of pacing. Emphasize that this activity is an example of aerobic endurance.
[CCWR: 1.1/4.2/4.7]

E. CROSS TRAIN

Explain that ***cross training*** is a way to improve ***strength*** and ***cardiorespiratory fitness.*** Students stretch and warm up the upper and lower legs (e.g., stride jumpers, leg extensions, heel lifts, 10 jumps higher). Divide the group into pairs. One student times while the other performs the designated tasks. While being timed, students participate in four tasks in this order: two laps around the field or play area; 50 sit-ups; 100 jumps with a rope; and 20 push-ups. When all the tasks are completed, the student sprints to the finish line. Students switch roles and perform the designated tasks.

Variation: Students participate at stations rather than in pairs.

Variation: Repeat this activity on a regular basis. Students graph their results, set goals for improvement, and evaluate their attainment of the goals.
[CCWR: 4.1/4.3/4.11//5.3]

FITNESS GOALS

Indicator 2.6-5: ***Develop and attain a personal fitness goal to improve performance.***

SAMPLE LEARNING ACTIVITIES: K-2

Teacher Tip: Fitness testing can be used to provide a student with appropriate challenges, to individualize a student's educational program, and to assist the student to develop realistic and attainable goals based on his/her fitness level and health status. Fitness testing should not be performed merely to reward student success. The results of fitness testing can be used to structure the instructional program for all students.

A. RUN FOR THE GOAL

Establish a 200-yard circular running course. Each time a student passes the starting point, he/she receives a sticker. At the end of four minutes, students count the number of stickers received. Repeat the exercise in subsequent classes, and have students predict how many stickers they will receive. Students should strive to increase the number of stickers (thus the number of laps) with each class attempt.
[CCWR: 4.1/4.3/4.11]

B. SUCCEED!

Develop a series of cards that describe activities beginning with the letters in the word SUCCEED. Set up seven stations, one for each letter. Students circulate to each station, draw a card, and perform the exercise or skill named or illustrated on the card. If they perform it successfully, they keep the card and move on. Each student must be able to spell SUCCEED with their seven cards. Each student submits the SUCCEED cards to the teacher who issues them a challenge card. The challenge card instructs the student to perform one of the designated tasks again and to meet or exceed the number of repetitions already achieved. Ideas for challenge cards might include:

Sit-ups = 17
Under and over = 5 bridges
Cross-country skier = 10
Crunches = 8
Extensions, leg = 10
Exercise of choice = 5
Dribble and dunk jump = 10

Variation: Develop cards that have three levels of repetitions. The first time the student does the circuit, he/she completes the first level then progresses to the next higher level each time the circuit is repeated.
[CCWR: 4.1/4.3/4.9]

Teacher Tip: Many variables contribute to the attainment of fitness goals. The student who routinely scores well may begin to see little improvement. Students with health problems may find it more difficult to improve. Student achievement can be based on setting reachable goals and completing the task needed to reach those goals.

C. SCORE A GOAL FOR FITNESS

Create a list of possible fitness goals—some realistic for students at this level and some that are not. Divide the class into five groups. Each group decides which goals are appropriate for students their age. Reconvene the class and create a class list. Have the class vote on the top five goals. Assign one goal to each group. The group decides how to attain the goal and then presents its ideas to the rest of the class. After discussion, each student selects one personal fitness goal he/she would like to achieve and writes or illustrates three things to help accomplish the goal.

Variation: Use fitness testing results to assist students to pick a goal and develop a simple plan for improvement. Students record progress in a weekly log and adjust the goal based on their progress.

Variation: Group students who selected similar goals. Students assist each other in reaching the goal.
[CCWR: 4.1/4.2/4.3]

FITNESS GOALS

Indicator 2.6-5: ***Develop and attain a personal fitness goal to improve performance.***

SAMPLE LEARNING ACTIVITIES: 3-4

Teacher Tip: Students should be encouraged to participate in home and community activities that support the achievement of their fitness goals. Before summer vacation, have each student write a summer fitness goal. Encourage students to keep track of their goal over the summer. Review their progress when school starts in the fall. Wellness is a lifelong pursuit, not just a physical education activity.

A. PERSONAL GOAL SETTING

Early in the school year, students participate in a health-related fitness test. Before releasing the test results, discuss personal improvement efforts and how you plan to help students achieve their goals. Share the test results and assist each student in developing one or two goals to be achieved by the end of the year. Provide students with a goal sheet similar to the one below.

FITNESS GOALS			
Activity	**Results**	**Goal**	**Plan to Achieve Goal**
Mile Run	12:20	12:00	■ Run in PE 3 times per week ■ Run with dad on weekends

[CCWR: 4.1/4.3/4.4]

B. HIT THE TARGET

This activity enables students to predict their performance on a number of fitness activities and to use that information to set and refine goals. Develop a fitness task sheet similar to the sample below. Each child begins by making a prediction of the number of exercises he/she can perform in one minute, then performs the exercise for one minute and notes the actual number of repetitions performed.

Exercise	Prediction	Performance	Revised Goal	2nd Try
Push ups				
Mountain climbers				
Sit-ups				

Students answer the following questions:

- Were the goals too easy or two difficult? Why?
- Did setting a particular goal help to achieve the target? Explain how it helped.
- What factors influenced your performance?
- What is most important: reaching the goal or making an improvement?

Discuss the student responses and repeat the activity.

Variation: Modify this activity for use with running and walking activities.
[CCWR: 4.1/4.3]

C. TOGETHER IN FITNESS

Administer a health-related fitness test early in the school year. Total the number of scores for each test item for each grade level. Work with the students in each grade to develop a grand total goal for the repeat test later in the school year. Students calculate the improvement each student needs to make in order to achieve the grade level goal. (For example, during fall testing the fourth grade completes 500 curl-ups. Their grade level goal for the spring test is 750 curl-ups.) Strategize with each class to decide how best to achieve this goal. Set aside a day in the spring to retest the students, total up the scores, and celebrate the achievement of the students' goals.
[CCWR: 4.1/4.2/4/3]

D. PARTNER PASS

Divide the class into pairs. Give each pair a ball. Assun the sit-up position and facing each other with toes to ing, students simultaneously perform a sit-up and pas ball to their partner. Challenge the students to set thei personal best record for continuous partner pass si without throwing or catching errors.
[CCWR: 4.1/4.2]

FITNESS AND WELLNESS

Indicator 2.6-6: ***Describe the components of health-related fitness and how each contributes to wellness.***

SAMPLE LEARNING ACTIVITIES: 5-6

A. TIME FLIES WHEN YOU'RE HAVING FUN

Create a number of strips of paper with one endurance activity written on each and place them in a hat, begin the class by having students brainstorm reasons why individuals might be overweight. Then brainstorm ways people deal with being overweight and classify those ways as healthy or unhealthy. Explain that one way to achieve and maintain a healthy body composition is ***low intensity exercise.*** Set a timer for 20 minutes. Each student selects a strip of paper and performs the endurance activity noted on it. Once that activity is completed, the student immediately returns for a second strip of paper and continues to do so until the 20 minutes have expired. Encourage students to keep moving the entire 20 minutes. Conclude by discussing the value of all forms of activity. Students write a journal entry describing how being active contributes to personal wellness.
[CCWR: 3.8/4.9/5.3]

B. FIT TAG

For this activity, create five fitness cards. On one side of the card, write the name of one of the health-related fitness components and on the other side, a related activity (e.g., cardiorespiratory endurance: jog two laps). Select five students to be "it" and give each one a fitness card. These students must tag a student who does not have a card. When a student is tagged, he/she takes the fitness card and completes the health-related fitness activity on it. Now that student becomes a tagger and repeats the process. Students cannot tag the student who tagged them. Conclude the activity by asking students to name the five components and to describe activities that develop fitness in that area.

Variation: At the end of the tag game, each student holding a card must name the fitness component and describe an activity that enhances that component. The activity cannot be the one listed on the card.
[CCWR: 3.13/5.3]

C. FIRST PRIORITY

For this activity, create 10 signs that list one health benefit of aerobic exercise and illustrate an exercise that best represents the benefit. Place the 10 signs around the gym. After a warm-up, students prioritize the 10 benefits. When you shout "First Priority," each student runs to the sign illustrating the benefit he/she thinks is the most important. Each student completes 10 repetitions of the exercise illustrated at that station. On signal, students move to their second priority, and so on. At the conclusion of the activity, students discuss why they chose one benefit over the other.

Variation: After this activity, students write an essay describing the priorities and justifying their choices.

Variation: As students move to each new station, they must justify their choice before starting the exercise. Allow students to change their choices before beginning the exercise.

Variation: Provide students with a worksheet that describes the 10 benefits. In small groups, students rank the benefits and then present their ideas and justifications to the class. The class ranks the benefits and then performs appropriate activities in rank order.
[CCWR: 3.1/3.10/5.3]

D. GRAB BAG

For this activity, create strips of paper, each describing a particular strength exercise (e.g., push-ups, crunches). Divide the class into four groups. One student from each group selects a strip of paper from a paper bag. Each group researches and discusses the selected exercise and prepares a brief presentation for the rest of the class. Groups describe the correct way to perform the exercise, the muscle groups involved, and the health benefits derived from the exercise. After the presentation, the group leads the rest of the class in a set of repetitions of the exercise.
[CCWR: 3.8/3.13/4.2/5.3]

E. CIRCUIT CITY

Establish 12 stations at which students perform muscular strength and endurance activities. Between each station, set up a relaxation station. At this station, post information about muscular strength and endurance. After completing the entire circuit, discuss how muscular strength and endurance contributes to wellness. Students create a chart, poster, or illustration describing the benefits of these exercises on wellness.
[CCWR: 3.15/4.9/5.3]

FITNESS AND WELLNESS

Indicator 2.6-6: ***Describe the components of health-related fitness and how each contributes to wellness.***

SAMPLE LEARNING ACTIVITIES: 7-8

Teacher Tip: Students are more likely to value the inherent benefits of exercise if they have a basic understanding of its impact on their health, appearance, and feelings. Emphasize the positive role fitness activities can play in all aspects of one's life.

A. 48 REASONS

Divide the class into small groups to brainstorm reasons why individuals should exercise. After a designated time period, reconvene the class and create a master list. Students classify the responses into categories (e.g., psychological benefits, physical benefits) and discuss each.

Variation: Each group brainstorms reasons to exercise and then ranks its responses from most important to least important. Groups defend their choices and develop a class rank of reasons.

Variation: Write the name of each health-related fitness component on a sheet of chart paper. Each time a group names a reason to exercise, discuss where it should be placed. Some reasons may fit in more than one category. Students defend the placements.
[CCWR: 3.8/3.11]

B. EXERCISE LOTTO

For this activity, create at least one station for each component of health-related fitness. At each station, place a deck of playing cards and a poster or illustration of an exercise or activity related to the fitness component. Write ***comprehensive exercise program*** on the board and ask students to define the term. After students have an understanding of the term, divide the class into small groups, and assign each group to a station. One student selects a card from the deck and the team performs the designated exercise the number of times indicated by the draw. The draw and activity are repeated two more times, and the total number of repetitions are recorded on a chart at the station. Students rotate to the next station and repeat the activity, recording the results. At the end of class, tally the number of repetitions at each station. Reemphasize the need for a comprehensive workout.

Variation: Choose one activity. Pick a card, have all students perform the designated number of repetitions, and repeat the process 10 times. Tally the number of repetitions. Discuss the disadvantages of this type of exercise program that focuses on only one aspect of fitness.
[CCWR: 4.2/4.9/5.3]

C. CALL OUT

Announce one component of health-related fitness and then call out the name of one body part. Students demonstrate an appropriate activity using that body part. For example, if you call out "flexibility" and "shoulders", students can perform a back scratch. Check the student performances for appropriate selection and technique.
[CCWR: 3.9/5.3]

Teacher Tip: The following activity can be used to support a health fair or community wellness day. Sponsor a contest, awarding fitness "prizes" for the winning theme, logo, or poster.

D. STEPS FOR LIFE

Students develop an acrostic poem that reflects the benefits of a healthy lifestyle. Students create a phrase or theme (e.g., *Steps For Life*, *Wellness Works*) and develop the poem and related artwork. A sample acrostic is shown below.

Stop illegal drugs.
Terminate smoking.
Exercise three to four times per week.
Pursue and maintain healthy body weight.
Snack nutritiously.

Fasten seat belts.
Obtain regular healthcare.
Reduce stress.

Limit animal fats.
Immunize.
Forget exposure to sun.
Eat more fruits, vegetables, and fiber.

[CCWR: 3.15]

E. SPORT READY

This activity emphasizes the need for general and specific stretching activities. Demonstrate sport-specific stretches for several different activities. Then divide the class into small groups, and assign each group a sport. Each group designs a sport-specific stretching activity, identifying the muscle groups used, as well as the rationale for the specific stretch and then leading the rest of the class in the activity. Encourage students to use visual aids (e.g., posters, charts, computer graphics, CD-ROMs, muscle or skeletal models) to explain their activity.

Variation: Invite high school or college athletes, certified athletic trainers, and coaches to discuss and demonstrate sport-specific stretching and conditioning activities. If a number of these individuals are available, create sport stations where small group of students can participate in a number of sport-specific demonstrations.

Variation: Assign a group of students to design sport-specific stretching routines that become part of the daily routine. For example, one group of students can be the running team and lead the group in appropriate stretching activities prior to a class jog or run.

Variation: Students design a stretching handbook that illustrates and describes activities for various sports. The handbook can be printed and distributed to community sport coaches.

[CCWR: 2.6/2.8/3.8/3.15/5.1]

TRAINING

Indicator 2.6-7: ***Discuss and apply basic principles of training to fitness activities.***

SAMPLE LEARNING ACTIVITIES: 5-6

A. MUSCLE MATCH

Create two sets of cards. Label one set with the names of various muscles, and on the other set describe an exercise that works that muscle or muscle group. Define ***specificity, elasticity,*** and ***flexibility*** and discuss their relationship to effective fitness activities. Divide the class into two groups. Give one group the muscle cards and the other group the exercise cards. Students find a partner with an appropriate matching card. Both students perform the exercise, then return their cards and repeat the activity. Monitor the exercises for correct technique. Stop the action to point out appropriate training techniques. Return the students' attention to the definitions and relate them to the activity.

[CCWR: 3.2/3.9]

B. ROLL THE DICE

This activity focuses on the safe performance of various exercises. Correctly and incorrectly demonstrate several exercises. Students critique the demonstration and create a list of exercise tips. After discussing the list, lead the class in a number of designated exercises. The number of repetitions is determined when one student rolls the dice.

[CCWR: 3.7/4.5/5.1]

Teacher Tip: Before the next activity, review vocabulary such as *muscular strength, endurance, resistance, repetitions,* and *overload training* .

C. PUSH-UP HOCKEY

Explain that the duration the muscle works against resistance influences muscle endurance. Demonstrate different kinds of push-ups that might be used to increase arm muscle endurance (e.g., line salute, wall, elevator, partner push-ups). Pair students and have them face each other, about 6 feet apart, in the traditional push-up position. One partner has a tennis ball. The object is to roll the ball between the arms of the partner. The partner tries to stop the ball with one hand while remaining in the push-up position. A goal is scored when the ball rolls between the arms of the partner. Time play for 30 seconds, allow a brief rest and then have the partners play for one minute. The final game is played for two minutes. After the game, brainstorm the effects of the longer game and the need for ***progression.***

[CCWR: 3.1/4.2]

Teacher Tip: Heart rate monitors record heart rate, allowing students to concentrate on their workout while receiving constant feedback on performance. Some models enable the student to transfer data from the monitor to a computer, where the information can be displayed as a table, graph, or chart. These monitors are an important way to integrate technology into the health and physical education classroom.

D. IN THE TARGET ZONE

An important concept for training is the ability to monitor one's heart rate and modify exercise to stay within an appropriate ***aerobic zone.*** Teach students how to determine their ***maximal heart rate*** and then have students determine the upper and lower limits of their aerobic target zone. (Review ways to monitor the pulse rate during exercise, or introduce heart rate monitors if available.) Once students are comfortable taking and recording their own pulse, explain why it is so important to monitor one's pulse rate during exercise. Introduce the concept of ***intensity level,*** and show students a simple chart to help them gauge how hard they are working when they exercise (e.g., create a scale from 1 (very, very light) to 10 (extremely hard). Each student jumps rope at a slow pace for 30 seconds, takes and records his/her pulse, and then rates the intensity of the exercise. Next, each student jumps rope at a medium pace for 30 seconds and repeats the pulse and intensity recording. Finally, each student jumps rope at a challenging pace, one that puts him/her in the target zone. After recording the appropriate data, students evaluate if they were above or below the target zone and adjust the next exercise accordingly. Discuss the importance of reaching the target zone and using it to get the most benefit from exercise.
[CCWR: 2.7/3.7/4.3]

Teacher Tip: The success of any station or circuit activity depends on the preparation of the teacher. Before the class meets, be sure that signs describe the nature of the activity. Use posters, drawings, or pictures to clearly illustrate the exercise. Keep students moving from station to station, using upbeat music that changes frequently to keep student interest and enthusiasm. Monitor student activity at each station.

E. MEET YOU AT THE STATION

This activity reinforces the message that exercise can be most beneficial when it follows the 5-20-5 schedule (five minutes of strength, 20 minutes of cardio training, and five minutes of stretching). After a brief warm-up, assign students to one of 15 to 20 stations (based on the size of the class). Students stay at each station for one minute and then rotate throughout the entire circuit.

SUGGESTED STATIONS		
STRENGTH STATIONS	**AEROBIC STATIONS**	**STRETCHING STATIONS**
■ Seated bicep curls ■ Curl-ups or crunches ■ Upright rows with hand weights or resistance tubing ■ Military/overhead press with hand weights	■ Bench stepping ■ Jogging in place ■ Jumping rope ■ Stair climbing on bleachers ■ Stationary bike riding	■ Achilles and calf against wall ■ Tailor sitting ■ Hamstring stretch ■ Sit and reach ■ Back-saver toe touch

Students record pulse rate (using either a pulse rate monitor or manual measure) during the activity. After students complete the circuit, discuss the principles of balanced training, the need for exercise on a regular basis, and the importance of correct technique to prevent injury.
[CCWR: 4.9/5.1/5.3]

TRAINING

Indicator 2.6-7: ***Discuss and apply basic principles of training to fitness activities.***

SAMPLE LEARNING ACTIVITIES: 7-8

Teacher Tip: Before involving students in the next activity, review the concepts of *overload* and *progression*.

A. MAX OUT!

Over a period of several weeks, students participate in an activity that demonstrates ***overload*** and ***progression.*** Students complete two maximum sets of a strength exercise such as crunches or push-ups. Record the number of repetitions each student completes. Conduct the same activity three days a week for at least two weeks. During this time, students keep a log of the number of repetitions and comment on their ability, attitude, and accomplishments. At the end of the time period, discuss how the principles impacted the training period, and have students describe follow-up activities that support continued progress.
[CCWR: 3.8/4.3/4.11]

B. FIT DELAY

Students need to understand and apply appropriate exercise sequences when considering a workout plan. This teacher-directed activity leads students through seven parts of a workout. Students are always one step behind the teacher. The teacher begins with a warm-up but students do not start it until the teacher moves to flexibility. After completing the entire sequence, students defend the sequence of activities.

- Warm-up
- Flexibility
- Muscle strength and endurance
- Cardiorespiratory endurance
- Cool down
- Restretch
- Hydrate (drink water)

Variation: Small groups develop an example of one phase and, in order, lead the class through the appropriate phase.

[CCWR:3.9/5.3]

C. INTRODUCING INTERVALS

One way to increase cardiorespiratory fitness is to participate in ***interval training***. For this activity, you need a 400-meter track or an area marked at 400 meters and 200 meters. Students run 400 meters and then walk 200 meters for recovery before running 400 meters a second time. Explain that students should pace themselves (e.g., run the 400 in about 90 seconds with a 2.5 minute recovery walk). Repeat four cycles. After students have completed the run-walk cycles, students jump rope until their heart rate reaches 80% of the MHR for two minutes. When their heart rate reaches that point, students begin a rest period (walking) until their heart rate returns to 120 beats per minute (about two minutes). Repeat this for two cycles. Reconvene the class, cool down, and discuss the benefits of interval training. Ask students the following questions:

- Why does interval training build cardiorespiratory fitness?
- Was it difficult to pace yourself? Why?
- What did you do to pace yourself and complete the cycle?
- What are the advantages of this kind of training?
- What are some variations of interval training? What activities could be substituted for running and jumping rope?

[CCWR: 3.2/3.8/3.12]

PHYSIOLOGICAL INDICATORS

Indicator 2.6-8: ***Assess physiological indicators of exercise before, during, and after physical activity, and describe how these can be used to monitor and improve performance.***

SAMPLE LEARNING ACTIVITIES: 5-6

Teacher Tip: Students need an understanding of the cardiovascular, respiratory, and nervous systems in order to be able to participate in the following activity.

A. BEAT IT

Each student needs a small index card and a pencil. Students practice taking their resting heart rate. Once they feel comfortable with this, students warm up and complete a one-minute period of aerobic exercise. After the one-minute period, students take their pulse and record it on the card. After a one-minute rest, students repeat the entire sequence a total of five times. Circulate and assist students who may have difficulty finding their pulse. At the end of the series, students share the data collected and discuss why there may be variations.

Variation: Divide the class into pairs to review their pulse rate findings and create an idea web that explains why the heart rate increases with consecutive periods of exercise.

Variation: Divide the class into two groups. One group monitors heart rate while the other monitors respiratory rate, then the groups switch roles. Discuss the correlation between exercise, heart rate, and respiratory rate.
[CCWR: 2.7/3.8]

Teacher Tip: Changing the intensity of a workout impacts the way the body works. This next activity helps students become aware of changes in the heart rate during exercise of varying intensity.

B. KNOW YOUR BODY

Set up a small, defined space, 40 yards square and marked by cones. Students take their resting pulse rate and record it, then walk around the cones at a medium pace for one minute. On signal, students take their pulse and record. After a 30-second rest, students take and record a second recovery pulse rate. Students jog around the cones at a medium pace for one minute and repeat the pulse taking and recording. Finally, students run the circuit for one minute at a fast pace and take their pulse rate immediately and at 30 seconds and record. Students graph the pulse rates and relate the results to the type of activity being performed. Students share their graphs and discuss the results.
[CCWR: 3.7/3.8]

C. SWEATSHOP CHALLENGE

Brainstorm ***physiological indicators*** that change during exercise (e.g., heart rate, respiratory rate, sweating, body temperature, perceived exertion or effort). Write the ideas on the board, creating a column for each item. For the next 20 minutes, students move through a teacher-designed obstacle course, stopping for a one minute rest at five minute intervals. After students have completed the activity, return to the indicators listed on the board. As students share the changes they experienced, write their comments in the appropriate column.

Variation: Provide each student with a chart, similar to the one below. During each section of the activity, students record changes. Discuss the results.

PHYSIOLOGICAL INDICATORS MONITORING CHART

Directions: Check the physiological indicator at the times shown on the chart. If the change is an increase, write in a "+"; if the change is a decrease write in a "-"; if there is no change, write "NC".

	Heart Rate	Breathing	Sweating	Body Temp	Exertion
Rest					
5 minutes					
10 minutes					
15 minutes					
20 minutes					
Recovery					

[CCWR: 3.7/3.12]

PHYSIOLOGICAL INDICATORS

Indicator 2.6-8: ***Assess physiological indicators of exercise before, during, and after physical activity, and describe how these can be used to monitor and improve performance.***

SAMPLE LEARNING ACTIVITIES: 7-8

A. TRAIN FOR GAIN

For this activity, create a six-station aerobic circuit lasting 30 minutes. Students complete the circuit and related activities two to five times per week for six weeks. Each time the students participate in the circuit, they perform the designated activities for one minute with a one minute break between circuits. At each new interval, students record their pulse rate. Following the six week training circuit, students graph their pulse rates and include the graph in a report detailing the rationale for the physiological effects that occurred.
[CCWR: 3.6/3.7/3.12]

Teacher Tip: Review the target heart zone and how to determine it before implementing this activity.

B. FIND YOUR TARGET ZONE

Challenge students to select an activity that elevates their heart rate into the target zone and keeps it there for a minimum of five minutes. Offer students a number of options, such as jogging, jumping rope, or performing a step aerobics sequence. Once students have completed the first activity, they select a second and third and follow the same procedures. After all three activities have been completed, students write in a journal which activity was most effective in keeping the heart rate in the target zone.
[CCWR: 3.6/3.7/3.12]

C. PULSE WALK

For this activity, each student needs a small index card and a pencil. Students take their resting pulse before beginning on a 20 minute walk. During the walk, students record their pulse rate every two minutes. (Signal every two minutes.) At the completion of the walk, students take and record their pulse at two and four minutes post exercise. Discuss the benefits of walking as a form of exercise.

Variation: Students graph the results and describe the physiological changes that occur during exercise.

Variation: Use walking pathways that offer additional challenges (e.g., hills, uneven terrain) or paths that can be easily adapted for students of varying abilities. Students walk the course, monitor their pulse rate, and compare the physiological changes resulting from each course.
[CCWR: 3.6/3.7/3.12]

FITNESS PLANS

Indicator 2.6-9: ***Develop a personal fitness plan, using data from health assessments and fitness testing.***

SAMPLE LEARNING ACTIVITIES: 5-6

Teacher Tip: Fitness testing should be used to develop meaningful instructional experiences that enhance students' abilities to meet and exceed fitness goals.

A. CHECKLIST 30

Develop a 30-item list of various fitness test items (e.g., one-minute jump rope, flexed arm hang for time, sit and reach). Over a designated period of time, students complete all thirty tasks, recording a score for each on the checklist. At the end of the circuit, each student identifies three areas of success and three areas to improve upon.

Variation: After students have identified their needs and successes, organize groups with similar needs. Each group discusses ways to improve their fitness score for the identified activities. Using this information, the group develops a plan to improve, works together to achieve their goals, and monitors group performance until the next fitness test.

[CCWR: 3.12/4.1/4.2]

B. A FITNESS EXAMPLE

Divide the class into small groups. Provide each group with a description of a young person's fitness level, interests, and general health. Each group identifies the important concerns, selects one or two fitness goals for their "student," and develops a plan to meet the goals. Students share the example and their recommendations and demonstrate activities to improve the individual's fitness status.

FITNESS CASE STUDIES

Elroy is an 11-year-old sixth grade student who likes to play video games. Occasionally, Elroy rides his bike to the playground and just "hangs" with his friends. He likes to snack on chips and ice cream, and his friends often tease him about being pudgy. He says he'll grow out it when he hits his growth spurt. In the first school fitness test, Elroy could not finish the mile run. Even now, it takes him 30 minutes to finish it.

Ally is an 11-year-old who is much taller than the rest of her classmates. Everyone wants her to play basketball, but she really doesn't like the sport. Ally likes to talk on the phone and e-mail her friends. She likes to swim but she doesn't live near a lake or pond.

[CCWR: 3.1/3.13/4.2]

FITNESS PLAN

Indicator 2.6-9: ***Develop a personal fitness plan, using data from health assessments and fitness testing.***

SAMPLE LEARNING ACTIVITIES: 7-8

Teacher Tip: This activity emphasizes personal goal setting rather than competition. Encourage students of similar abilities to work together to achieve their goals.

A. WOGGLE

"Woggle" is a combination of walking and jogging. Students cover as much distance as possible in one 20-minute session, alternating as needed between jogging and walking. Students jog until they feel the need to walk and only walk until they feel capable of running. Students measure the distance covered in the 20-minute period then develop strategies to improve the distance in the next Woggle activity. Each student creates a chart to monitor his/her progress and repeats the activity three times per week. After a set number of Woggle sessions, students complete their chart and write a summary reflecting their impressions of the activity. Students share the results with the class.
[CCWR: 3.1/3.8/4.1/4.3]

B. GOAL SET

Discuss the differences between short-term goals and long-term goals and provide examples of each. After each student has been tested using a health-related fitness assessment, share the results and assist the student to develop goals to address areas of need. Monitor student progress on a weekly basis through activity sheets, journal entries, or conferencing. Link students with similar needs to provide support.

Variation: For each health-related fitness area, develop a menu of activities that students can use to improve personal performance. Students pick two fitness areas and select activities from the menu to improve those areas. Review the student-developed plans to be sure they are realistic, and monitor progress.
[CCWR: 3.1/3.8/4.1/4.3]

C. MINI FITNESS CIRCUIT

Divide the class into groups of five students. Assign each group a health-related fitness component. Each group develops several tasks aimed at improving one area of health-related fitness and selects one activity to demonstrate to the class. As the rest of the class participates in the activity, the group monitors their performance. Each student selects one activity he/she likes best and writes a plan, including goals, to improve personal performance.
[CCWR: 4.1/4.2/4.3]

FITNESS BENEFITS

Indicator 2.6-10: ***Discuss the physical and psychological benefits derived from health-related fitness activities.***

SAMPLE LEARNING ACTIVITIES: 9-12

Teacher Tip: Relaxation techniques are an important part of stress management and can contribute to overall wellness by lowering heart rate and blood pressure.

A. RELAX TENSE MUSCLES

Ask: "What do you do to relax?" List the ideas on the board. Divide the class into several groups to explore various relaxation methods. Assign each group one method of relaxation (e.g., quick fix/time-out, Jacobson's Progressive Relaxation Method, autogenic/self-generated, biofeedback, imagery). Each group investigates the relaxation method, the history of the method, common applications, and how to implement it then leads the class in an activity derived from the method.

Variation: Students perform a variety of relaxation exercises and describe the differences when muscles relax and contract. Ask: "When might such activities be useful? Which activities seem to work best? Why?"

Variation: Students research the role of endorphins released during exercise and the psychological benefits of regular exercise.

[CCWR: 2.6/3.4/3.5/3.12]

B. HOW DOES IT RATE?

Organize the class into pairs to complete an activity or exercise and chart the benefits of the activity (scale: 3 = Best, 2 = Fair, and 1 = Poor). Students add activities to the list and evaluate each activity on the chart. From the list, students develop and implement a one-week plan emphasizing three of the most beneficial activities. Students keep a log of participation.

SAMPLE ACTIVITY RATING			
ACTIVITY	**AEROBIC CAPACITY**	**FLEXIBILITY**	**MUSCLE STRENGTH**
Jumping rope	3	2	2
Jogging	3	1	2

[CCWR: 3.6/3.7/3.12]

Teacher Tip: The following activity requires students to develop a fitness inventory and evaluate the results. Provide students with samples from textbooks or Web sites. Be sure the questions do not ask for confidential information. Check with the school nurse or counselor before using a survey. For the example provided, you can assign point values for each statement and provide an acceptable or healthy point total for the inventory.

C. FITNESS INVENTORY

Develop a fitness inventory that enables students to evaluate their current level of fitness activity. Students complete the inventory, indicating by a check mark, which activities fit their fitness profile. Divide the class into small groups to share their results and discuss ways to improve their activity level. Reconvene the entire class and create a master list of ways to improve one's activity level. Then create two columns on the chalkboard: *Physical* and *Psychological*. Students decide which of the chosen activities provide physical benefits, psychological benefits, or both. Students discuss and justify their answers.

SAMPLE FITNESS INVENTORY

Place a check mark by the numbered items you participate in regularly.

1. I perform stretching exercises at least three times per week.	
2. I walk to school.	
3. I take the stairs instead of an elevator or escalator.	
4. I play a sport/game at least two times per week.	
5. I ride a bike, skateboard, or roller blade at least two times per week.	
6. I swim only in the summer.	
7. I walk the length of the mall at least three times per week.	
8. My basic exercise program is of the "chip and dip" variety in front of the TV.	
9. I park far away and walk when at the mall.	
10. I lift weights at least three times per week.	

[CCWR: 3.12/4.3]

D. MY FITNESS COURSE

Each student develops a list of personal fitness goals he/she would like to achieve. Divide the class into groups with similar goals. Provide each group space and appropriate equipment to develop a six to eight station exercise course focusing on their group members' specific goals. Each group designs the course, performs the designated activities, and develops a written plan for the project, explaining the benefits derived from their plan.

Variation: Use computer software to design a fitness course, write a marketing plan for its use (emphasizing the health benefits), and present the plan to the class.
[CCWR: 2.8/4.1/4.2/4.3]

E. FITNESS THINKING

Divide the class into small groups. Using the word ***fitness*** as a starting point, students brainstorm all the words they can think of related to fitness and develop an idea web. Reconvene the entire class and share the ideas. Use the web to generate class discussion in several areas such as the following: "Do some people have a negative concept of fitness? If so, why? How does fitness relate to sports? What are the benefits of fitness activities?"
[CCWR: 3.2/3.8]

F. WHAT DOES IT TAKE TO BE HEALTHY?

Students interview individuals who have been actively engaged in a fitness program for at least a year. Students develop the responses into a written profile of the individual and share the information with the rest of the class. (Be sure students protect the identity of the individual.) Using the profiles, the class develops a list of the benefits of exercise.

FITNESS INTERVIEW

- Why do you choose to exercise on a regular basis?
- Do you feel different since you began a regular exercise program? Explain.
- What adjustments do you make in your diet?
- What is your weekly exercise schedule?
- How do you feel before, during, and after exercise?
- How do you find the time for exercise?
- How much does your exercise program cost?
- What advice would you give to someone thinking about starting a regular exercise program?

[CCWR: 3.8/3.12]

Teacher Tip: Using a heart rate monitor and computer to record and graph data increases student interest and provides students with more accurate information. It also enhances the students' abilities to use technology. If such equipment is not available for student use on a regular basis, contact a local fitness center or healthcare provider to demonstrate the equipment.

G. WARM-UP WORK RATE

Working in small groups, students complete a five-minute warm-up and record their pulse. Next, students complete a 15 to 20 minute step aerobics activity and record their pulse at intervals of five, 10, and 15 minutes. Students repeat a five-minute cool-down and record their pulse. Students graph the results and discuss the changes at each interval.

Variation: Students perform the same activity with only a 30-second a warm-up. Discuss how long it takes to get to the target heart rate and the importance of warming up before activity.
[CCWR: 2.7/3.9/3.12]

Teacher Tip: Enlist the assistance of the library media specialist for the next activity. The library-media specialist can instruct students in search strategies to access needed information from print media, on-line sources, and networked or single-user CD-ROMs.

H. BODY SYSTEMS AND FITNESS

Students research one body system and report the effects of exercise on that system. (Be sure to include the effects of exercise on the immune system, the reproductive system, and the endocrine system.) Students should consider the effects of exercise based on gender, age, and ethnic background.
[CCWR: 2.6/2.8/3.15]

INJURY PREVENTION

Indicator 2.6-11: *Describe how sports injuries can be prevented.*

SAMPLE LEARNING ACTIVITIES: 9-12

Teacher Tip: Many sports injuries can be prevented if participants wear the right equipment; however, just as many injuries can be prevented if players follow the rules of the game. The next activity supports this concept.

A. CREATE A GAME

Divide the class into small groups. Each group develops an original game where the object is to be safe and prevent injuries. Each group devises the safety rules and equipment needed for the original game and then teaches the game to the rest of the class, emphasizing the safety aspects of the game.

Variation: Develop an original game for younger students and teach it to them.

Variation: Students develop rules of safe play for a specific sport or game.

Variation: Students create a video, poster, illustration, or cartoon that demonstrates safe and unsafe ways to play a game or sport. Students share it with younger students.

Variation: Students develop a sports injury prevention video for presentation on the local cable station. Students interview the certified athletic trainer, coaches, local doctors, sports specialists, and athletes about injury prevention. Questions should focus on injury prevention for the average person participating in sports and fitness activities.
[CCWR: 2.6/2.8/3.15/5.1/5.2]

B. QUESTIONABLE EXERCISE

Select and display illustrations or descriptions of questionable exercise practices. Students discuss the practice and decide on a suitable alternative. Examples might include the following: back arching, abdominal stretch, donkey kick, windmill, neck and upper back extension, hurdler stretch.

Variation: Students perform safe exercises and monitor each other for correct positioning and action.
[CCWR: 5.1/5.2/5.3]

C. WHAT DO THEY SAY ABOUT EXERCISING?

Students compare articles about various forms of exercise from both professional and popular magazines (e.g., *Sports Illustrated*, *Runner's World*, *JOPERD*). Ask: "What do the articles say about exercise? How can people prevent various kinds of injuries? Who are most likely to become injured? What are the credentials of the writers? Is the article based on research? Did you find conflicting opinions? If so, why?"

Variation: Investigate exercise-related Web sites for information on sports injury prevention.

Variation: Students develop a list of resources regarding sports injury prevention, including print, media, and on-line resources as well as community programs and healthcare providers.
[CCWR: 2.4/2.6/2.8/3.4/3.5]

D. ANALYZING TO PREVENT INJURY

World-class athletes look at videos of their performances to spot areas to be improved as well as to spot problems that may contribute to injuries. Discuss several examples of such problems (e.g., a runner changes his/her stride or foot placement and the change might aggravate old injuries or create new ones). Videotape students participating in various forms of exercise (e.g., jogging, walking, performing specific exercises or stretches). Students analyze their performance for efficiency of performance, body alignment, use of arms, stride, and breathing patterns. Provide students with evaluative criteria. Using the criteria, students develop several recommendations to improve the performance.

Variation: Use commercially prepared videotapes to demonstrate the correct technique for various activities. After viewing the tapes, students create posters for display in the weight room, gym, and training areas.
[CCWR: 3.7/4.5]

E. VISIT TO THE TRAINER

Invite the school's certified athletic trainer to speak about safety and injury prevention. Use school facilities (e.g., weight room, gymnasium, athletic fields) to focus on injury prevention issues. Students develop a written summary of the trainer's recommendations.

Variation: Take students on a field trip to a large fitness facility and have the fitness specialist explain safeguards for novice and experienced clients.

Variation: Students explore the requirements for a career in sports injury prevention or fitness. Students develop career profiles on fitness-related specialists such as certified athletic trainers, sports medicine physicians, physical therapists, sports management specialist, health and physical education teachers, health educators, aerobic instructors, personal trainers, nutritionists, wellness specialists, or massage therapists. Students respond to the following question: "How do each of these specialists contribute to the safety of clients participating in fitness and sports activities?"

Variation: Invite athletes to talk about training regimens, safety issues, and injury prevention. The panel should address concerns about injuries they have experienced and how the injuries were treated. Be sure the panel represents a wide range of sports and activities and both genders.
[CCWR: 1.3/1.7/5.1/5.2]

F. INJURY INVENTORY

Students research the causes of injuries in sports and investigate which sports are most likely to have major injuries. Students develop recommendations to reduce the incidence and severity of the injuries.

Variation: Students work with the school nurse and the certified athletic trainer to develop profiles of injuries occurring as part of school-sponsored programs. Students compare the injuries occurring during athletic programs to injuries occurring in physical education classes. Students speculate on the causes of the incidents and offer solutions to prevent reoccurrence.

Variation: Students select a sport or activity and research the incidence of injuries occurring to participants. As a result of the research, students make specific recommendations to decrease the likelihood of injury.

[CCWR: 2.4/2.7/2.8/5.1/5.2]

G. INJURY PREVENTION EQUIPMENT

Divide the class into several small groups, and assign each group a sport activity. Each group develops a list of safety equipment that should be available for each activity, the potential costs of such equipment, and where such equipment can be purchased. Students inventory available equipment, considering appropriate numbers and sizes, the condition of the equipment, and its availability. Using the information gathered, students develop recommendations to improve school activity safety.

Variation: As part of a community service project, students develop an equipment list for community teams (e.g., town soccer, Little League baseball) and assist team managers in conducting an inventory. Students evaluate the types of equipment available (include facilities and fields as well as equipment) and make recommendations to improve safety.

[CCWR: 5.1/5.2/5.4/5.5/5.6]

Teacher Tip: The following activity focuses on common injuries, such as bruises or sprains, experienced by the "weekend athlete." Severe injuries, such as head injuries and fractures, require immediate medical attention. Students should be encouraged to participate in an approved first aid course, including basic life support procedures.

H. RESPONDING TO INJURIES

An important part of preventing future or more severe injuries is knowing what to do when certain injuries occur. Students develop injury response cards, simple index cards that describe the symptoms of common injuries and basic first aid procedures. The athletic trainer, school nurse, school physician, and local healthcare providers can be used as resources to develop the cards.

Variation: Students develop posters or pamphlets that provide basic information on the treatment of simple injuries (e.g., the RICE principle) and display in appropriate areas of the school.

[CCWR: 5.2/5.9]

I. MINIMIZING INJURY

The Boy Scout Motto, "Be Prepared," has specific importance for those participating in sport and fitness activities. Brainstorm what this means and then divide the class into three groups. One group discusses ***sport preparation*** (e.g., skills of the game, proficiency levels). The second group discusses ***rules preparation*** (e.g., knowing the rules of the game and any variations for the current circumstances, the role of officials). The third group discusses ***health preparation*** (e.g., having a regular physical, taking care of injuries). Each group develops a multimedia presentation on its aspect of preparation for participation in sport and fitness activities.

Variation: Obtain a copy of the pamphlet, *Minimizing the Risk of Injury in High School Athletics* from the National Athletic Trainers Association. Students read and discuss the pamphlet and discuss how the guidelines apply to anyone participating in sport or fitness activities.

Variation: Students investigate safety and injury prevention standards established by national sport governing bodies (e.g., NCAA, USOC).

Variation: Students investigate product testing of safety equipment, such as football helmets, bike helmets, or body padding.

[CCWR: 2.8/3.15/5.1/5.2/5.3]

Teacher Tip: Outdoor activities are often performed in extreme temperatures. Students need a basic understanding of body temperature regulation and basic first aid measures in order to prevent temperature-related illness or injury.

J. TAKING THE HEAT

Even the best-conditioned athlete can develop temperature-related health problems when working out. Brainstorm individuals who might be at higher risk for temperature-related problems. Encourage students to connect the risk of the individual with a particular situation (e.g., a person with a history of cardiac disease jogging at noon on a hot summer day). Divide the class into small groups, and assign each group a case study that clearly establishes the potential for temperature related problems. Each group develops suggestions to reduce the incidence of temperature-related incidents.

Variation: Students develop posters, cartoons, or pamphlets that describe precautions to prevent temperature-related problems and focus on proper clothing, hydration, and the general health of the individual as well as weather conditions.

SAMPLE CASE STUDIES: TEMP CONTROL

"Hot" Scenario

- It's 9 a.m. and already 75 degrees. The forecast calls for thunderstorms later in the day. Football practice begins at 10 a.m. How should I prepare for practice?

"Cold" Scenario

- I've never been skiing and I'm planning my first trip to the mountains. What should I do so I don't freeze to death on the slopes?

[CCWR: 3.15/5.1/5.9]

PERSONAL FITNESS PLANS

Indicator: 2.6-12: ***Design and evaluate a personal fitness plan, taking into consideration fitness, health and nutritional status, age, interests, and abilities, and discuss how the plan may be adapted to injury, illness, or aging.***

SAMPLE LEARNING ACTIVITIES: 9-12

A. WHAT IF...

Students design a personal fitness plan for an individual with special needs. Divide the class into groups. Students supplement the brief description noted below with more specific information about the individual. Each group designs and justifies a plan and demonstrates some of the activities outlined in the plan. Discuss the plans and offer suggestions for improvement.

INDIVIDUALIZED FITNESS PLAN: CASE STUDIES

- An overweight person over 50
- An overweight adolescent
- A person confined to a wheelchair
- A pregnant woman
- An underweight adolescent
- A person with a broken arm in a cast

Variation: Invite a physically challenged athlete to discuss his/her training program and sports experiences.

[CCWR: 4.1/4.2]

B. HOW WOULD YOU TEST IT?

In order to develop a fitness plan, students need to collect data. One element of data collection is fitness testing. Divide the class into five small groups. Each group develops a new testing activity for its assigned fitness component. Group members participate in the activity and record their team's results, then administer the test to two other student groups. Students collect the data, determine percentiles, reevaluate the items, and determine individual and group results. The data is compared among groups and a summary developed. Finally, each group develops a testing manual for its component and presents the manual and its findings to the class.

Variation: Assign each group a different component of fitness. Groups use the computer to analyze fitness and nutrition data and complete a written report.

Variation: Students develop a wellness survey and administer it to a specific population (e.g., sixth grade students, teachers, athletes). Using this information, students generate a list of ways to effectively test the fitness level of these individuals.

[CCWR: 3.2/3.6/3.7/3.8/3.12]

C. FITNESS JOURNAL

Encourage students to participate in fitness activities every day. To accomplish this, students keep a journal or log of fitness activities. The log includes the date and time of the activity, the type of activity, what benefits the activity might have produced, a rating of benefits and enjoyment, and a two-sentence summary of feelings about the activity.

Variation: Students use the computer to develop an activity log and keep records of participation throughout the year.

[CCWR: 4.3]

D. FITNESS STATUS

Students perform activities as part of a nationally recognized and researched fitness assessment. Raw scores are entered into the computer, and students receive a printout with suggestions for improvement. Using this information, students develop goals for fitness improvement, track achievement during a designated time period, and include this information in their annual portfolio.

[CCWR: 2.2/2.7/2.8]

E. PROJECT GOAL SETTING

Begin the class with a discussion of goal setting. Ask: "Why do people set goals? How can you improve your chances of achieving a goal?" Write the following elements of successful goal setting on large sheets of chart paper, solicit examples of each, and leave the sheets posted in the room throughout the year.

REACH FOR THAT GOAL

- Make the goal realistic but challenging.
- Find people to support your efforts.
- Write the goal down and post it somewhere you will see it everyday.
- Develop a written plan.
- Outline step-by-step how to reach your goal.
- When you reach a goal, set a new one.

After the discussion of goal setting, students develop a personal fitness plan by identifying needs (collecting data) and then writing goals. Students select activities to reach the goals and write a weekly and monthly update on the plan. Students complete the plan on their own and keep accurate records.

[CCWR: 3.12/4.1/4.3]

Teacher Tip: Many of these activities require students to investigate the impact of a particular sport or activity on health. Encourage students to choose less common sports (e.g., rugby, badminton, bowling, surfing) and recreational activities (e.g., orienteering,, mountain climbing, dancing).

F. DANGEROUS DIETING

Establish four stations with information about different fad diets. Students move to the various stations and collect information. Students return to small groups and discuss how the various diets might impact one's health by responding to the following questions: "Is the diet dangerous? Why or why not? Is it safe for athletes? children? women?"

Variation: Students examine the role nutrition plays in various sports and activities (e.g., the diet of long distance runners or swimmers). Students develop an eating plan that compliments an exercise plan for a particular sport or activity and present the information to the class in a packet or visual display.

Variation: Groups determine which nutritional and exercise program is best for a person described in a case study. Case studies should include individuals with health conditions, athletes concerned with weight loss or gain, and older athletes such as master swimmers or runners. Be sure to include athletes who participate in wheelchair sports, those participating in Special Olympics programs, and athletes of both genders.
[CCWR: 3.8/3.9/3.12/4.2]

G. FUTURE FITNESS

Students develop a description of their current fitness plan, paying attention to diet, age, activity level, and any health conditions. Students develop possible changes to the plan at one year, five year and 10-year intervals. Students produce a future fitness plan that reflects the demands of college, work, and family commitments; finances; accessibility; and expanding interests.
[CCWR: 4.1/4.3]

H. STEPS TO SUCCESS

Developing a personal fitness plan helps students reach their goals. Brainstorm a step-by-step approach to developing and meeting fitness goals. (A sample is shown below.) Students develop a personal fitness plan using the "step" approach and share with a partner. Partners review each other's plans and make suggestions for improvement. Students implement the plan and report to their partner on a weekly basis. At the end of the semester, partners develop a written summary of their achievements, presenting factors that impacted the attainment of their goals.

STEPS TO FITNESS SUCCESS

- Make it personal. Write the element you most want to improve.
- Motivate yourself. Write a letter to yourself describing the goal you want to attain.
- Choose activities you will continue to do.
- Proceed at a reasonable pace. Don't try to change overnight.
- Plan time for fitness. Keep a calendar noting the times you exercise.
- Make a list of any equipment you need to exercise, and make sure it is readily available.
- Vary the type and location of your exercise. Take a walk in the park, jog along the river, or bike at the gym.
- Find a friend. Exercising with a partner makes the activity more fun.
- Enjoy yourself. Make a list of healthy activities you enjoy.
- Reward yourself when you reach certain goals.

[CCWR: 4.1/4.3]